

1. FULL NAME: MARIA GEORGIADOU**2. DATE AND PLACE OF BIRTH, NATIONALITY, CURRENT RESIDENCE**

Date and place of birth: 19 January 1983, Thessaloniki, Greece
Nationality: Greek
Current residence: Dedalou 1, 45333, Ioannina, Greece
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3. CURRENT POSITION

08/2022 – now Group Leader at Biomedical Research Institute (BRI), Foundation for Research and Technology Hellas (FORTH), Ioannina, Greece

4. EDUCATION AND DEGREES AWARDED

Ph. D.: Ph.D. in Biomedical Sciences, Faculty of Medicine, KU Leuven, Belgium. Date of award: 5 July 2012
Supervisor Prof. Peter Carmeliet (webpage: <http://www.vrc-lab.be/peter-carmeliet>. Email: peter.carmeliet@vib-kuleuven.be). Source of funding: KULeuven International Doctoral program (2007-2011).
Diploma: Diploma in Biology, School of Biology, Aristotle University of Thessaloniki, Greece. Date of award: 24 November 2004, grade: 8.1/10

5. PREVIOUS WORK EXPERIENCE

06/2021 – 08/2022: Head of Cancer Cell Signalling Unit; R&D; Oncology Research
Orion Corporation Orion Pharma (<https://www.orion.fi/en/rd/orion-rd/>)
Job description: heading a team of 9 permanent Orion Pharma employees, plus thesis students and postdocs in collaboration with academic laboratories. Responsible for early discovery and preclinical projects. Identification of novel targets, target validation, assay development and biology support in preclinical projects in regards to target confidence, mechanism of action, target safety, indication and biomarker selection. Responsible of project budgeting. Involved in building oncology strategy and pipeline. Handling several academic and industrial collaborations.

09/2018 - 05/2021: Senior Scientist; R&D; Oncology Research since September 2018. Orion Corporation Orion Pharma (<https://www.orion.fi/en/rd/orion-rd/>)
Job description: In Vitro Pharmacologist contributing to the Oncology research strategy with focus on Cell Signalling, Cell Metabolism and DNA Repair Pathways.

09/2013 - 08/2018: Post-doctoral researcher at Turku Centre for Biotechnology, University of Turku, Finland. Mentor: Prof. Johanna Ivaska (webpage: <http://www.ivaskalab.com/> and email joivaska@utu.fi). Source of funding:

EMBO Long-term fellowship, Academy of Finland postdoctoral fellowship, Finnish Cultural Foundation.

07/2012 - 06/2013: Postdoctoral researcher at the Vesalius Research Centre, VIB in Leuven, Belgium (KULeuven, Belgium) (<http://www.vrc-lab.be/>) under the mentorship of Prof. Peter Carmeliet (peter.carmeliet@vib-kuleuven.be)

10/2007 – 07/2012: PhD at VIB (Flemish Institute of Biotechnology) and KULeuven, Leuven, Belgium, in the Department of Oncology, Faculty of Medicine, under the supervision of Prof. Peter Carmeliet (peter.carmeliet@vib-kuleuven.be). Subject “*Exploring novel anticancer strategies by targeting endothelial metabolism*”.

07/2005 – 09/2006: Internship, School of Pharmaceutical Sciences, AUTH, Greece. Supervisor Prof. Aggelos Kanellis. Subject: *Isolation and characterization of diterpene synthases from the glandular trichomes of Salvia fruticosa and Salvia pomifera leaves*.

10/2004 – 06/2005: Internship, Dental School, AUTH, Greece. Supervisor Prof. Dimitra Sakellari (dimisak@med.auth.gr). Subject: “*Polygenic regulation and its association with periodontal diseases*”.

06-07/2004: Practical Training in the Centre of Clinical embryology in vitro Fertilization, Thessaloniki, Greece Supervisor Prof. C. Triantaphyllidis (atriant@bio.auth.gr)

10/2003 – 09/2004: Diploma thesis, School of Biology, AUTH, Greece. Supervisor Prof. C. Triantaphyllidis. Subject: “*Genetic Identification of Greek Partridges Alectoris*” (atriant@bio.auth.gr)

6. Leaves: maternity leaves October 2014-May 2015; March 2017-February 2018

7. LINGUISTIC SKILLS

Mother tongue: Greek

English: Proficiency (Michigan University); working language since 2007.

French: Sorbonne II (Université de Sorbonne, Paris)

German: Mittelstufenpruefung (Goethe-Institut)

Dutch: Basic knowledge by living in Flemish-speaking part of Belgium

Finnish: Basic knowledge by completing level 4 out of 10 at a state evening school.

8. RESEARCH RELATED QUALIFICATIONS

a. FUNDING ACQUISITION

- Awarded from Academy of Finland. Amount 253110 euros. Funding period: 3 years
- Awarded from Finnish Cultural Foundation 28000 euros. Funding period: 1 year
- Awarded from the EMBO (EMBO Long-Term Fellowship) for postdoctoral research. Amount: 35000 euros per year for 2 years. Funding period: 2 years (2014-2016).
- Awarded from the Flemish Cancer Association (Vlaamse Liga tegen Kanker) for my PhD project. Amount: 25000 euros. Funding period: 1 year (2010).

b. SUPERVISION & TEACHING

- Participated in the organization and teaching at the PhD course "Boost your science: Modern methods in life sciences" for two years 2017-2018.

Co-supervision of undergraduate students:

- PhD student Johanna Lilja, doctoral student of TUDMM, University of Turku, 09.2014 - 08.2018
- Master student Ira Kouru, Drug Discovery and Development, University of Turku, 09.2021 till now
- Master student Maria Rafeeva, Biomedical Imaging Turku, 02.2016 - 11.2016
- Master student Jelena Boeckx Bioengineering, KULeuven, 09.2011 - 08.2012
- Master student Ine Vandersmissen, Bioengineering, KULeuven, 09.2009 – 08.2010
- Lab-rotation student Salli Keinänen, Biochemistry, University of Turku, 03.2016
- Lab rotation student Anneleen Wislez, Biomedical Sciences, KULeuven, 05.2010
- Lab rotation student Laurence Collie, in Biomedical Sciences, KULeuven, 03.2010

c. AWARDS AND PRIZES

- Medix prize and Elias Tillandz prize in 2018 for the best publication (publication list n=7).
- Award by the Worldwide Cancer Research for one of the most outstanding abstracts submitted at the Beatson International Cancer Conference, July 2014.
- Travel grant awarded by the University of Turku, April 2014.
- Travel grant awarded by the Cancer Society of Finland, May 2014.

d. OTHER ACADEMIC AND PROFESSIONAL MERITS

- Leadership Training 2021
- Agile Method of Project Management Training 2019
- Act as external referee for the Research Foundation Flanders (FWO)
- Writing and reviewing skills: assisting in reviewing articles for journals such as Nature, Cell, Cancer Cell, Cancer Research, Cell Metabolism. Evaluation and assistance in writing grant proposals for Belgian (IWT, FWO) granting agencies.
- Courses for good scientific conduct: Training HSE laboratories (2011-2012), Ethics in science (2011-2012) and Notebook keeping (2007-2008), KULeuven, Belgium.
- Animal Science course and certificate (2010-2011), KULeuven, Belgium.
- Training in radioprotection and certificate (2010-2011), KULeuven, Belgium.
- Summer School of "Metabolomics and Metabolic Networks" (2009)
- Organisation of the 2nd International PhD Student Symposium "VIBes in Biosciences", 2010, Leuven, Belgium

e. SCIENTIFIC AND SOCIETAL IMPACT OF RESEARCH

- Total number of peer-reviewed publications is 23; H-index 21; total number of citations: >3500
- Total Funding : 384 109€
- Presentations: several (>25) poster presentations at International and national conferences.
- 3 awarded oral presentations based on abstract excellence
 1. Keystone Symposia. Angiogenesis: Advances in Basic Science and Therapeutic Applications, 2011

2. Gordon Research Seminar on Signaling by Adhesion Receptors, 2014
3. Beatson Cancer Conference on Cancer and Metabolism, 2014

LIST OF PUBLICATIONS

A. Original articles

1. Peuhu E, Jacquemet G, Scheele CLGJ, Isomursu A, Laisne MC, Koskinen LM, Paatero I, Thol K, **Georgiadou M**, Guzmán C, Koskinen S, Laiho A, Elo LL, Boström P, Hartiala P, van Rheenen J, Ivaska J. MYO10-filopodia support basement membranes at pre-invasive tumor boundaries. *Dev Cell*. 2022 Oct 24;57(20):2350-2364.e7.
2. Lerche M, Elosegui-Artola A, Kechagia JZ, Guzmán C, **Georgiadou M**, Andreu I, Gullberg D, Roca-Cusachs P, Peuhu E, Ivaska J. Integrin Binding Dynamics Modulate Ligand-Specific Mechanosensing in Mammary Gland Fibroblasts. *iScience*. 2020 Sep 4;23(9):101507.
3. Barber-Perez N*, **Georgiadou M***, Guzman C, Isomursu A, Hamidi H, Ivaska J. Mechano-responsiveness of fibrillar adhesions on stiffness-gradient gels. *J Cell Sci*. 2020 Jun 22;133(12):jcs242909. (* equal contributing first authors).
4. Pietilä M, Sahgal P, Peuhu E, Jäntti NZ, Paatero I, Närvä E, Al-Akhrass H, Lilja J, **Georgiadou M**, Andersen OM, Padzik A, Sihto H, Joensuu H, Blomqvist M, Saarinen I, Boström PJ, Taimen P, Ivaska J. SORLA regulates endosomal trafficking and oncogenic fitness of HER2. *Nat Commun*. 2019 May 28;10(1):2340.
5. **Georgiadou M***, Ivaska J*. Tensins: Bridging AMP-Activated Protein Kinase with Integrin Activation. *Trends Cell Biol*. 2017 Oct;27(10):703-711. (* corresponding authors)
6. **Georgiadou M***, Lilja J, Jacquemet G, Guzmán C, Rafeeva M, Alibert C, Yan Y, Sahgal P, Lerche M, Manneville JB, Mäkelä TP, Ivaska J*. AMPK negatively regulates tensin-dependent integrin activity. *J Cell Biol*. 2017 Apr 3;216(4):1107-1121. (* corresponding authors) – *Selected in the top 10 best articles published in 2017 at JCB*.
7. Lilja J, Zacharchenko T, **Georgiadou M**, Jacquemet G, De Franceschi N, Peuhu E, Hamidi H, Pouwels J, Martens V, Nia FH, Beifuss M, Boeckers T, Kreienkamp HJ, Barsukov IL, Ivaska J. SHANK proteins limit integrin activation by directly interacting with Rap1 and R-Ras. *Nat Cell Biol*. 2017 Apr;19(4):292-305. – Won the Medix and Elias Tillandz prizes in 2018
8. Peuhu E, Kaukonen R, Lerche M, Saari M, Guzmán C, Rantakari P, De Franceschi N, Wärrä A, **Georgiadou M**, Jacquemet G, Mattila E, Virtakoivu R, Liu Y, Attieh Y, Silva KA, Betz T, Sundberg JP, Salmi M, Deugnier MA, Eliceiri KW, Ivaska J. SHARPIN regulates collagen architecture and ductal outgrowth in the developing mouse mammary gland. *EMBO J*. 2017 Jan 17;36(2):165-182.
9. Jacquemet G, Baghirov H, **Georgiadou M**, Sihto H, Peuhu E, Cettour-Janet P, He T, Perälä M, Kronqvist P, Joensuu H, Ivaska J. L-type calcium channels regulate filopodia stability and cancer cell invasion downstream of integrin signalling. *Nat Commun*. 2016 Dec 2;7:13297.
10. Kaukonen R, Mai A, **Georgiadou M**, Saari M, De Franceschi N, Betz T, Sihto H, Ventelä S, Elo L, Jokitalo E, Westermarck J, Kellokumpu-Lehtinen PL, Joensuu H, Grenman R, Ivaska J. Normal stroma suppresses cancer cell proliferation via mechanosensitive regulation of JMJD1a-mediated transcription. *Nat Commun*. 2016 Aug 4;7:12237.
11. Kalucka J, Missiaen R, **Georgiadou M**, Schoors S, Lange C, De Bock K, Dewerchin M, Carmeliet P. Metabolic control of the cell cycle. *Cell Cycle*. 2015;14(21):3379-88.
12. Ferreira GB, Vanherwegen AS, Eelen G, Gutiérrez ACF, Van Lommel L, Marchal K, Verlinden L, Verstuyf A, Nogueira T, **Georgiadou M**, Schuit F, Eizirik DL, Gysemans C, Carmeliet P, Overbergh L, Mathieu C. Vitamin D3 Induces Tolerance in Human Dendritic Cells by Activation of Intracellular Metabolic Pathways. *Cell Rep*. 2015 Feb 10;10(5):711-725.

13. Maes H, Kuchnio A, Peric A, Moens S, Nys K, De Bock K, Quaegebeur A, Schoors S, **Georgiadou M**, Wouters J, Vinckier S, Vankelecom H, Garmyn M, Vion AC, Radtke F, Boulanger C, Gerhardt H, Dejana E, Dewerchin M, Ghesquière B, Annaert W, Agostinis P, Carmeliet P. Tumor vessel normalization by chloroquine independent of autophagy. *Cancer Cell*. 2014 Aug 11;26(2):190-206.
14. Schoors S, Cantelmo AR, **Georgiadou M**, Stapor P, Wang X, Quaegebeur A, Cauwenberghs S, Wong BW, Bifari F, Decimo I, Schoonjans L, De Bock K, Dewerchin M, Carmeliet P. Incomplete and transitory decrease of glycolysis: a new paradigm for anti-angiogenic therapy? *Cell Cycle*. 2014;13(1):16-22
15. Schoors S*, De Bock K*, Cantelmo AR*, **Georgiadou M***, Ghesquière B, Cauwenberghs S, Kuchnio A, Wong BW, Quaegebeur A, Goveia J, Bifari F, Wang X, Blanco R, Tembuysen B, Cornelissen I, Bouché A, Vinckier S, Diaz-Moralli S, Gerhardt H, Telang S, Cascante M, Chesney J, Dewerchin M, Carmeliet P. Partial and transient reduction of glycolysis by PFKFB3 blockade reduces pathological angiogenesis. *Cell Metab*. 2014 Jan 7;19(1):37-48. (* = **equally contributing first author**) Cited >200 times
16. De Bock K, **Georgiadou M**, Carmeliet P. Role of endothelial cell metabolism in vessel sprouting. *Cell Metab*. 2013 Nov 5;18(5):634-47.
17. De Bock K*, **Georgiadou M***, Schoors S, Kuchnio A, Wong BW, Cantelmo AR, Quaegebeur A, Ghesquière B, Cauwenberghs S, Eelen G, Phng LK, Betz I, Tembuysen B, Brepoels K, Welti J, Geudens I, Segura I, Cruys B, Bifari F, Decimo I, Blanco R, Wyns S, Vangindertael J, Rocha S, Collins RT, Munck S, Daelemans D, Imamura H, Devlieger R, Rider M, Van Veldhoven PP, Schuit F, Bartrons R, Hofkens J, Fraisl P, Telang S, Deberardinis RJ, Schoonjans L, Vinckier S, Chesney J, Gerhardt H, Dewerchin M, Carmeliet P. Role of PFKFB3-driven glycolysis in vessel sprouting. *Cell*. 2013 Aug 1;154(3):651-63. (* = **equally contributing first author**) – Cited >450 times
18. Bono F, De Smet F, Herbert C, De Bock K, **Georgiadou M**, Fons P, Tjwa M, Alcouffe C, Ny A, Bianciotto M, Jonckx B, Murakami M, Lanahan AA, Michielsen C, Sibrac D, Dol-Gleizes F, Mazzone M, Zacchigna S, Herauld JP, Fischer C, Rigon P, Ruiz de Almodovar C, Claes F, Blanc I, Poesen K, Zhang J, Segura I, Gueguen G, Bordes MF, Lambrechts D, Broussy R, van de Wouwer M, Michaux C, Shimada T, Jean I, Blacher S, Noel A, Motte P, Rom E, Rakic JM, Katsuma S, Schaeffer P, Yayon A, Van Schepdael A, Schwalbe H, Gervasio FL, Carmeliet G, Rozensky J, Dewerchin M, Simons M, Christopoulos A, Herbert JM, Carmeliet P. Inhibition of tumor angiogenesis and growth by a small-molecule multi-FGF receptor blocker with allosteric properties. *Cancer Cell*. 2013 Apr 15;23(4):477-88.
19. Coulon C, **Georgiadou M**, Roncal C, De Bock K, Langenberg T, Carmeliet P. From vessel sprouting to normalization: role of the prolyl hydroxylase domain protein/hypoxia-inducible factor oxygen-sensing machinery. *Arterioscler Thromb Vasc Biol*. 2010 Dec;30(12):2331-6.
20. Roncal C, Buysschaert I, Gerdes N, **Georgiadou M**, Ovchinnikova O, Fischer C, Stassen JM, Moons L, Collen D, De Bock K, Hansson GK, Carmeliet P. Short-term delivery of anti-PlGF antibody delays progression of atherosclerotic plaques to vulnerable lesions. *Cardiovasc Res*. 2010 Apr 1;86(1):29-36.
21. Schneider M, Van Geyte K, Fraisl P, Kiss J, Aragonés J, Mazzone M, Mairbäurl H, De Bock K, Jeoung NH, Mollenhauer M, **Georgiadou M**, Bishop T, Roncal C, Sutherland A, Jordan B, Gallez B, Weitz J, Harris RA, Maxwell P, Baes M, Ratcliffe P, Carmeliet P. Loss or silencing of the PHD1 prolyl hydroxylase protects livers of mice against ischemia/reperfusion injury. *Gastroenterology*. 2010 Mar;138(3):1143-54.e1-2.
22. Roncal C, Buysschaert I, Chorianopoulos E, **Georgiadou M**, Meilhac O, Demol M, Michel JB, Vinckier S, Moons L, Carmeliet P. Beneficial effects of prolonged systemic administration of

PIGF on late outcome of post-ischaeamic myocardial performance. *J Pathol.* 2008 Oct;216(2):236-44.

23. Sakellari D, Katsares V, **Georgiadou M**, Kouvatsi A, Arsenakis M, Konstantinidis A. No correlation of five gene polymorphisms with periodontal conditions in a Greek population. *J Clin Periodontol.* 2006 Nov;33(11):765-70.

B. Non-refereed scientific articles

Genetic identification of Greek partridges *Alectoris graeca* and *Alectoris chukar*. Triantafyllidis A, Karatzas D, Georgiadou M, Drikos I, Andreakou E, Lappa M, Chatzinikos E, Manios N, Papageorgiou N, Triantaphyllidis C. (XXVII Congress of the International Union of Game Biologists, Hannover, Germany; 08/2005)

C. Publications intended for the general public, linked to the applicant's research

1. Georgiadou M. *New target for the fight against cancer as a result of excessive blood vessel formation.* Sunday newspaper Aggelioforos, 2013 (article in Greek).

D. Theses

1. **Doctoral dissertation:**

Georgiadou M. *NOTCH: a metabolic gatekeeper of the endothelial cell cycle.* KULeuven, Belgium, 2012

2. **Diploma Thesis:**

Georgiadou M. *Genetic Identification of the Greek Partridges Alectoris.* Aristotle University of Thessaloniki, Greece, 2004. (in Greek)